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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,222

12/15/2004

Carlo A Dirusso

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EXAMINER

KASZTEJNA, MATTHEW JOHN

ART UNIT

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3739

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,222	<b>Applicant(s)</b> DIRUSSO ET AL.	
	<b>Examiner</b> MATTHEW J. KASZTEJNA	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/15/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 2 is objected to because of the following informalities: the claim reads "wherein the first plane is about 75° to about 90° relative to the second plane". Based on the specification, it is believed the claim should read "wherein the first plane is orthogonal by an angle of about 75 to about 90 relative to the second plane". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9-12 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,916,147 to Boury.

**In regard to claims 1, 11 and 18-19**, Boury discloses an endoscope comprising: a handle 22; and a shaft 30 extending from the handle, the shaft having a front end comprising a first active deflection section 36a including a plurality of rings pivotably connected to each other and a second active 36b deflection section including a plurality of rings 40 pivotably connected to each other, wherein the first active deflection section is limited to deflection in a first plane and the second active deflection section is limited to deflection in a second different plane, and wherein the first plane is angled to the second plane (see Figs 2-3 and Col. 7, Lines 64 - Col. 8, Line 51).

**In regard to claim 2**, Boury discloses an endoscope wherein the first plane is about 75° to about 90° relative to the second plane (see Fig. 2).

**In regard to claim 3**, Boury discloses an endoscope, wherein the second active deflection section is limited to deflect only in left and right directions relative to the handle (see Col. 7, Lines 64 - Col. 8, Line 51).

**In regard to claim 4**, Boury discloses an endoscope, wherein the first active deflection section is limited to deflect only in upward and downward directions relative to the second active deflection section (see Col. 7, Lines 64 - Col. 8, Line 51).

**In regard to claims 5-6 and 12**, Boury discloses an endoscope, wherein the first active and/or second deflection sections are *adapted* to deflect through an angle of about 110° to about 220° (see Col. 8, Lines 18-23).

**In regard to claim 9**, Boury discloses an endoscope, wherein the endoscope comprises a cystoscope comprising means for viewing 360° inside of a generally spherical shape through a fixed entrance into the generally spherical shape by a camera or an optical lens at the front end of the shaft without axially rotating the shaft (see Col. 1, Lines 18-23).

**In regard to claim 10**, Boury discloses an endoscope, wherein the first active deflection section comprises rings 40 pivotably connected to each other to form a frame of the first active deflection section, wherein a connection of the rings to each other comprises balls located in sockets of the rings and at least one connecting member extending through a hole in the balls (see Fig. 7).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,916,147 to Boury in view of U.S. Patent No. 6,639,213 to Ogura et al.

**In regard to claims 7-8 and 13-14,** Boury discloses an endoscope comprising: a handle 22; and a shaft 30 extending from the handle, the shaft having a front end comprising a first active deflection section 36a including a plurality of rings pivotably connected to each other and a second active 36b deflection section including a plurality of rings 40 pivotably connected to each other, wherein the first active deflection section is limited to deflection in a first plane and the second active deflection section is limited to deflection in a second different plane, and wherein the first plane is angled to the second plane (see Figs 2-3 and Col. 7, Lines 64 - Col. 8, Line 51). Boury are silent with respect to a brake actuator located on the handle adapted to lock one of the active deflection sections at a desired position. Ogura et al. teach of an analogous apparatus having a first control subsection 42 that includes, as shown in FIG. 5, angling knobs 42a and 42a' and first locking levers 42b and 42b'. The angling knobs 42a and 42a' are used to bend the first bending portion 24. The first locking levers 42b and 42b' are used to lock the angling knobs 42a and 42a' at desired angular positions (see Figs. 5 and

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20a-c). It would have been obvious to one skilled in the art at the time the invention was made to provide a brake actuator on the handle in the apparatus of Boury to provide an alternate means of locking the catheter in a desired position during use as taught by Ogura et al.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,916,147 to Boury in view of U.S. Patent No. 5,938,588 to Grabover et al.

**In regard to claims 15-17**, Boury discloses an endoscope comprising: a handle 22; and a shaft 30 extending from the handle, the shaft having a front end comprising a first active deflection section 36a including a plurality of rings pivotably connected to each other and a second active 36b deflection section including a plurality of rings 40 pivotably connected to each other, wherein the first active deflection section is limited to deflection in a first plane and the second active deflection section is limited to deflection in a second different plane, and wherein the first plane is angled to the second plane (see Figs 2-3 and Col. 7, Lines 64 - Col. 8, Line 51). Boury are silent with respect to first and second shape-memory frame members having a general tubular shape comprised of a superelastic material. Grabover et al. teach of an analogous apparatus provided with a handle and a flexible shaft connected to the handle. The flexible shaft has a passive deflection section and an active deflection section operated by a control wire. The passive deflection section has a sheath holding a portion of the control wire therein. The sheath is made from a superelastic alloy material and is resiliently deflectable to bend with the passive deflection section without permanent deformation

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or substantial fatigue over a working life of the endoscope. The sheath has continuous column strength to support axial loads without cross-sectional and longitudinal deformation or loss of flexibility (see Figs. 2-3 and Col. 4, Lines 7-67). It would have been obvious to one skilled in the art at the time the invention was made to provide first and second shape-memory frame members having a general tubular shape comprised of a superelastic material in the apparatus of Boury to enhance the accuracy and total deflection of the active deflection section as taught by Grabover et al.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. KASZTEJNA whose telephone number is (571)272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J. K./  
Examiner, Art Unit 3739

/Linda C Dvorak/  
Supervisory Patent Examiner, Art  
Unit 3739

2/15/08